finger into the bladder a cavity so enormous was encountered that I thought I had broken into the peritoneal cavity, but in the anterior part of its floor I found an elliptical opening, 4 cm long by 2 cm broad, into another chamber in which I could feel the sound passed into the bladder through the urethra. This opening was enlarged, an assistant passed two fingers in the rectum and on then exploring the lower vesical cavity and the posterior urethra I found there was no enlargement of the prostate at all, either intravesical or intra-urethral. I was dealing with a peculiar vesical deformity the conditions of which had become exaggerated by the strain incident to the long existing obstruction of a tight stricture.

It was really an hour-glass bladder the ureters running diagonally across the lower wall of the septum, ending in a trigone which had gradually hypertrophied until it sagged into the vesical outlet, producing total retention and simulating to the finger in the rectum prostatic enlargement to such a degree that in the presence of the other symptoms deception was easy. The passage between the two chambers was anterior to the dip of this mass.

The operation for relief of the condition consisted in removing a section of the septum, 8 cm long by 3½ wide, so as to provide for free drainage and approximately throw the two chambers into one. The trigone was then raised, the heavy intra-ureteral bar excised, the ureters dissected out and carried to the end of the raw surface left by the removal of the septum at its junction of the lower bladder wall, a distance probably 7 cm and there securely anchored in a denuded space prepared for them. It was found necessary to resect a portion of the right ureter. The patient made an uneventful recovery. The abdominal wound leaked a very little for about ten weeks. He now passes from 180 to 240 cc of urine every three to four hours in a good stream and does not have to rise at night. He passes the catheter once a day and withdraws from 200 to 250 cc of urine.

A cystoscopic examination was made at the time of writing this report, April 15th, and a very good view of an unobstructed bladder neck obtained. The mouth of the right ureter may be seen in its new position a long way off from the bladder neck. The urine may be seen coming from the left ureter but the mouth itself not observed for it is concealed by a sag in the bladder wall.

I suppose that other surgeons doing many bladder and prostatic operations might add to this experience. But whether they can or not do so, I want these cases to go on record as illustrations that in an apparent condition of prostatism, with an apparent tumor of the prostate to account for it, there sometimes is not really a real prostatism and the tumor is not really prostatic, however much it may seem to be so from a carefully conducted rectal examination.

## A FATAL CASE OF PEMPHIGUS, BEGINNING IN THE PHARYNGEAL MUCOSA.*

By M. W. FREDRICK, M. D., San Francisco.

That the mucous surfaces can participate in or be the starting point of almost all the pathological processes which arise on the general integument is such a well-known fact that it need not be insisted upon here. We have only to think of the exanthemata and syphilis to obtain a forcible illustration of our point. The trouble in recognizing the pathological processes lies in the changed appearance of the lesions on the mucous surfaces, which often makes a diagnosis difficult or impossible. This is more liable to be the case if the disease in point is a rare one and there is no concomitant skin lesion to serve as a diagnostic guide. I might soothe my diagnostic pride with the reflection that many authors maintain that a diagnosis of pemphigus, when affecting the mucous surfaces alone can not be made, but I will freely admit that I was astonished when I at last saw what I was dealing with in the following:

Mrs. J., widow, aged 68, had always enjoyed good health, and had raised four children who are in fairly good health. While there is a general neurotic tendency in the children, it is absent in the mother. I had seen the patient before for several minor things, such as the correction of her refraction, and some slight middle ear trouble, but had never treated her for anything of consequence. In October, 1904, she came to me with the history that the day before, while drinking coffee and eating a slice of bread, one of the breadcrumbs had scratched her throat. Examination revealed a long, narrow excoriation in the region of the right pyriform sinus, such as might easily have been caused by the passage of a rough body over the mucous surface, and treatment was given accordingly. She returned several days later with a similar lesion below the left tonsil, for which she could not account. At the same time I noticed a very much engorged vein crossing the right tonsil, and sent her to her family physician, Dr. Chas. G. Levison, for general examination; he reported that there was nothing wrong with the patient except a general lack of tone, for which he prescribed tonics and Nauheim baths. She came to the office on two more occasions, several days apart, with new lesions in the region in front of the tonsils. After that I did not see her for about a week, when I was asked to visit her at her home, as she was too weak to go out. I found that she had a number of new lesions on the posterior part of the tongue and on the interdental parts of the buccal mucosa. These spots suggested eroded mucous plaques more than anything else, except on the tongue; where they had coalesced, presenting a picture such as one often sees in severe cases of mercurial stomatitis, a broad, grayish patch occupying almost the entire breadth of the tongue. Eating had become painful by this time. Dr. Levison and I sought to discover the source of the trouble, without success. There was no history of lues or ingestion of mercury. Her dentist stated that he had not used any material containing mercury in her mouth. The lesions in the mouth kept growing more numerous until finally the whole mucous surface was covered. The pain and discomfort kept increasing in the same ratio, and eating was almost impossible, although free use was made of orthoform, anesthesin, and solutions of antipyrin. The etiology still remained obscure until one day, while I was calling on her, her nightdress slipped disclosing a necklace of blebs, some already dry, and some still fresh, which at once gave a clue to the diagnosis. These blebs had been present several days, but had been wrongly ascribed to the baths which the patient had been taking. The next day several blebs appeared on the lips, and the patient became hoarse, showing that the disease was extending downwards also. On the conjunctiva several small patches appeared, but not until several days later were blebs seen on the lid margin. Whether this process on the conjunctiva would have given rise to essential atrophy or shrinking of the conjunctiva could not be decided, as the process did

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not continue long enough in that locality. From this time on the spread of the blebs was rapid, until finally the whole body was covered, some of the blebs being two to three inches long. Even the vulva and anus were implicated, the lesions in this region giving rise to a great deal of pain. Drs. Regensberger and Montgomery saw the patient, and confirmed the diagnosis. Numerous measures were resorted to to relieve the patient's distress. Among other things she was wrapped in blankets which had been dipped in oil, but the annoyance of these was so great that she was returned to her ordinary nightclothes, and all the surfaces liberally covered with dusting powder. At last opiates were resorted to.

In view of the patient's age, of the fact that the blebs quickly became saggy and filled with pus, and, most of all, because the process had begun on the mucous surfaces, the prognosis was made infausta. This was confirmed by the patient's death taking place on Dec. 8th, about ten weeks after the first lesion had appeared. The extreme annoyance of having such an extensive area involved together with the impossibility of conveying nourishment to the patient (even nutrient enemata not being tolerated) were, without doubt the cause of the fatal ending.

This was the only case of pemphigus affecting the mucous surfaces that I had ever seen, and I may never see another, so rare are the cases. It is worthy of notice, in this connection, that my colleague, Dr. R. D. Cohn, has a parallel case to report to you at this meeting.

Having lost all my notes, I can not give exact data on this case. I know there was some fever, but I remember that it never exceeded 103.

I have seen several articles of late bearing upon the diagnosis of dermatoses when occuring on the mucous surfaces. A late number of the J. A. M. A. contains a very good article by Dr. Linn Emerson, of Orange, N. J., on the appearance of lichen planus in the mouth. If these lesions are confined to the mucous surfaces, and remain confined to that locality for years, as they do in some cases, they almost defy diagnosis. Owing to the thinness of the covering and the moisture to which they are constantly exposed the lesions present hardly anything characteristic. Moreover, their rarity makes familiarity with them an impossibility.

## MYOCARDITIS: ITS PHYSIOLOGY, PATHOLOGY, SYMPTOMS AND TREATMENT.

By NEIL DONALD GUNN, M. D. C. M., Pacific Grove.

In taking up the subject of myocarditis, I do so with a certain amount of apology, as the specialist may feel that it is a well-trodden path, but the general practitioner is, after all, the final court of appeal, and to such an one this paper is especially addressed. It is a subject that embraces nearly all heart symptomatology, and when we speak of such conditions as dilatation, hypertrophy and high tension, we are but dealing with entities or signs of a general vascular condition, that condition being usually summed up in the general term myocarditis. This term is more or less a misnomer, for it not only includes inflammatory conditions but also degenerations; the fact is, the latter embrace by far the greater number of pathological changes found. When, after many years of doubt, the clinician had evolved a working hypothesis to explain these various heart phenomena, physiology departed from its beaten paths and began to blaze new trails, and in the enthusiasm born of youth and inexperience, promised to clear up all that was obscure. Time has proven how much these newer methods have yet to develop before we can with confidence assure ourselves of what is taking place in the circulatory system.

Experimental physiology began most naturally on the circulation and the various physical and mechanical forces employed in propelling blood. The various reasons why the heart beats, offered since the discovery of the circulation, would fill a paper of some dimensions, and if one were to follow the arguments in favor of each explanation, it would occupy a volume. With all due respect to the dead and the living, "that vast army of experimentalists," we are still looking for light and still presenting problems that are unanswerable. Are we any nearer the cause of the heart beat and its various disturbances that were Bright and Brestowe? It is of interest to follow the various and varying moods and tenses of this question, and only a few references can here be made to the physiological work that has been done.

When Remak in 1844 discovered the ganglion in the heart walls, he founded a school that claimed that the heart beat was due entirely to nervous influence; Ludwig in 1848 described another group of nerve cells; then Bidder demonstrated yet another. As methods of research improved, Dogiel and Gerlach showed that ganglionic cells could be found in nearly all parts of the heart; Freidlander and Schweiger-Seidl and Valkman arrayed themselves with this school. These were the founders of a school that still has many advocates.

This theory seemed to satisfy clinician, physiologist and anatomist. The view certainly seems rational, as the great number of nerve centers and complex sympathetic network must necessarily have some function. By stimulating the various nerves connected with the heart the number of beats could be reduced or increased almost at will. Trophic disturbances could also be produced in the heart muscle, and what more was there to solve?

Engleman, an acute observer, happened while experimenting on an animal to notice that there was a rhythmic contraction of the ureter when all the nerves were severed; a segment of the same ureter would continue this rhythm; this led to the founding of a new theory, viz., the innate contractile nature of muscle.

Gaskell in England immediately began to study the muscle of the heart and showed that the vagus was not, at least constantly, an inhibitor of the heart, and when his great disciple, Martin, kept a mammalian heart beating outside the body for some months the myogenists seemed to have the best of the argument. This latter theory has been greatly strengthened by Professor Loeb of Berkeley,.

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